



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/706,285

11/13/2003

Richard Greenfield

1875.3700001

5666

26111 7590 08/02/2007
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
1100 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

ALIA, CURTIS A

ART UNIT

PAPER NUMBER

2609

MAIL DATE

DELIVERY MODE

08/02/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/706,285

Applicant(s)

GREENFIELD ET AL.

Examiner

Curtis Alia

Art Unit

2609

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date See Continuation Sheet.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :24 August 2004, 01 September 2004.

DETAILED ACTION

Double Patenting

1. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

2. Claims 1-20 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-20 of U.S. Patent No. 10/706285. This is a double patenting rejection.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 17-20 are rejected under 35 U.S.C. 101 because the claimed invention is a signal per se. A signal is not a process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 8 is rejected under 35 U.S.C. 102(e) as being anticipated by Long et al. (US 2003/0189952).

For claim 8, Long discloses a transmitter in a communications system wherein the communication system is subject to a noise signal having at least a first noise phase and a second noise phase for transmitting symbols at the first bit rate during the first noise phase and at the second bit rate during the second noise phase, whereby the first bit rate and the second bit rate are determined in a constrained rate receiver (see paragraph 8, lines 9-12).

Claim Rejections - 35 USC § 103

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2609

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1, 4, 7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over the background of Long et al. (US 2003/0189952) in view of Tzannes (US 2002/0181609).

For claim 1, Long discloses a method in a communications system comprising determining a first bit rate for symbols transmitted during the first noise phase (NEXT) and a second bit rate for symbols transmitted during the second noise phase (FEXT) and transmitting symbols at a first bit rate during the first noise phase and at the second bit rate during the second noise phase (see paragraph 8, lines 9-12).

For claim 1, Long teaches all of the limitations with the exception that the first bit rate and the second bit rate are constrained such that a transmission latency does not exceed a pre-determined maximum allowed transmission latency. Tzannes from the same field of endeavor teaches the provision of using seamless bit rate adaptations for certain latency requirements (see paragraph 166, lines 8-16). Thus, it would have been obvious to a person having ordinary skill

Art Unit: 2609

in the art at the time of the invention to adapt the bit rate to fit a latency limit. The adaptive bit rate of Tzannes can be implemented into the system of Long by giving bit rate requirements at the handshaking stage of transmission so as to establish the acceptable level of latency. The motivation for using an adaptive bit rate for control of latency as taught by Tzannes into the system of Long is that certain transmissions require different levels of latency (e.g., video, voice, etc.) and the system can adapt to these changes in transmission types.

For claim 4, Long discloses a transceiver in a communications system comprising a constrained rate receiver for determining a first bit rate for symbols transmitted during the first noise phase and a second bit rate for symbols transmitted during the second noise phase and a constrained rate transmitter for transmitting symbols at a first bit rate during the first noise phase and at the second bit rate during the second noise phase (see paragraph 8, lines 9-12).

For claim 4, Long teaches all of the limitations with the exception that the first bit rate and the second bit rate are constrained such that a transmission latency does not exceed a pre-determined maximum allowed transmission latency. Tzannes from the same field of endeavor teaches the provision of using seamless bit rate adaptations for certain latency requirements (see paragraph 166, lines 8-16). Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to adapt the bit rate to fit a latency limit. The adaptive bit rate of Tzannes can be implemented into the system of Long by giving bit rate requirements at the handshaking stage of transmission so as to establish the acceptable level of latency. The motivation for using an adaptive bit rate for control of latency as taught by Tzannes into the system of Long is that certain transmissions require different levels of latency (e.g., video, voice, etc.) and the system can adapt to these changes in transmission types.

Art Unit: 2609

For claim 7, Long discloses a receiver in a communications system wherein the system is subject to a noise signal having at least a first noise phase and a second noise phase (see paragraph 8, lines 9-12).

Note: the term "adapted to" on line 4 is not a positively recited claim limitation, therefore the limitations recited after the term are not given weight. However, the limitations recited after the term "adapted to" are taught in the background of Long.

For claim 7, Long teaches all of the limitations with the exception that the first bit rate and the second bit rate are constrained such that a transmission latency does not exceed a predetermined maximum allowed transmission latency. Tzannes from the same field of endeavor teaches the provision of using seamless bit rate adaptations for certain latency requirements (see paragraph 166, lines 8-16). Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to adapt the bit rate to fit a latency limit. The adaptive bit rate of Tzannes can be implemented into the system of Long by giving bit rate requirements at the handshaking stage of transmission so as to establish the acceptable level of latency. The motivation for using an adaptive bit rate for control of latency as taught by Tzannes into the system of Long is that certain transmissions require different levels of latency (e.g., video, voice, etc.) and the system can adapt to these changes in transmission types.

For claim 17, Long discloses transmission of a noise signal comprising a determined first bit rate for symbols transmitted during the first noise phase and a second bit rate for symbols transmitted during the second noise phase and symbols transmitted at a first bit rate during the first noise phase and at the second bit rate during the second noise phase, such that the

Art Unit: 2609

transmission latency in the communication system can be controllable (see paragraph 8, lines 9-12).

For claim 17, Long teaches all of the limitations with the exception that the first bit rate and the second bit rate are constrained such that a transmission latency does not exceed a pre-determined maximum allowed transmission latency. Tzannes from the same field of endeavor teaches the provision of using seamless bit rate adaptations for certain latency requirements (see paragraph 166, lines 8-16). Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to adapt the bit rate to fit a latency limit. The adaptive bit rate of Tzannes can be implemented into the system of Long by giving bit rate requirements at the handshaking stage of transmission so as to establish the acceptable level of latency. The motivation for using an adaptive bit rate for control of latency as taught by Tzannes into the system of Long is that certain transmissions require different levels of latency (e.g., video, voice, etc.) and the system can adapt to these changes in transmission types.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Paik et al. (US 2002/0064219), Seagraves et al. (US 2002/0008525), Amrany et al. (US 6,580,752), Amrany et al. (US 6,266,374), Long et al. (US 2004/0136405), Jeong et al. (US 2003/0219076), Long et al. (US 2004/0196938), Tzannes (US 2002/0034196).

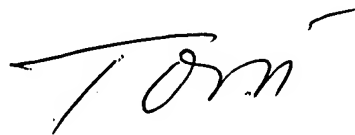
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Curtis Alia whose telephone number is (571) 270-3116. The examiner can normally be reached on Monday through Thursday 8:00AM to 5:00PM EST.

Art Unit: 2609

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dang Ton can be reached on (571) 272-3171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CAA

A handwritten signature in black ink, appearing to read 'Dang T. Ton', with a stylized flourish at the end.

**DANG T. TON
SUPERVISORY PATENT EXAMINER**